CHILDHOOD LEAD POISONING PREVENTION BRANCH

Study Guide for the Lead Project Monitor Certification Exam

California Department of Health Services,
Childhood Lead Poisoning Prevention Branch, Lead-Related Construction Unit

Introduction

This study guide has been designed to help you prepare for the lead project monitor written examination. The words "exam" and "examination" are used synonymously throughout the guide as are the words "questions" and "items".

Your formal study and experience in lead detection and hazard assessment should have provided you with the knowledge and skills you need to pass the examination. However, we suggest that you also study the information about the examination process and content given in this guide.

In addition to information about the examination process, this guide includes the following:

- ❏ Passing Score Information
- ❏ General Test Preparation Information
- ❏ General Strategies for Taking Written Examinations
- ❏ Examination Content Overview (*This outline indicates the proportions of the test that are devoted to major topics.*)
- ❏ Recommended Reference List (*Test items have been taken from these materials.)*

You may take the examination prior to applying to the Department of Health Services (DHS) for a lead certificate, but you still must meet DHS requirements in order to become fully certified.

You may take the exam as many times as you need in order to pass. The Department recommends that you take the Lead-Related Construction training again if you fail the exam 3 times, but this is not a requirement. You must submit a completed re-examination form, and pay the re-examination fee to be rescheduled for the examination.

To register for the exam, obtain a registration form from Cooperative Personnel Services (CPS) by calling (916) 263-3644. CPS will provide instructions and study guides for the exam. CPS can also answer questions about exam schedules, locations, exam fees, and special accommodations.

If you have further questions regarding your application for certification or the exam requirements, call the Lead-Related Construction Information Line at 1-800-597-LEAD (outside California (510) 869-3953) or visit **www.dhs.ca.gov/childlead** and click on "Materials".

Passing Score Information

A criterion referenced approach is used for setting the passing score on the exam. This approach involves setting the passing score on the basis of minimum standards for competent practice (i.e., job requirements) rather than relative candidate performance. Standards are consistently applied regardless of the form of the exam administered or the ability level of the candidate group.

One important advantage of the criterion referenced approach is that the passing score may be lowered for a hard examination and increased for an easy examination thus providing safeguards for both the candidate and the public. The criterion referenced approach to setting passing scores is commonly used in certification examinations.

General Test Preparation Information

Following is information to help you study for the written examination for the California Lead Project Monitor Certification Exam

Do some work every day in preparation for the examination. Budget your time. Set aside a definite study period for each day. Begin concentrating as soon as you sit down to study.

Study by yourself and with others to encourage an exchange of ideas. Your study should focus on learning the principles and practices of lead poisoning prevention as well as gaining a broad understanding of the content areas listed in this syllabus. *It is not an advisable study technique for candidates to memorize large groups of test questions for the certification test process.* A large computerized item bank has been created to generate different test forms on a regular basis.

The focus of your study should be on knowledge and skills relevant to a newly certified Lead Project Monitor. You

should not need to study information appropriate for Lead Inspector / Assessors, Project Monitors, or Project Designers unless you plan to take those exams also.

Develop your own illustrations and examples to check on your understanding of a topic. Make sure you fully understand the basic terms for each content area. Create your own glossary of terms and look up any new words in a reference book.

The test will contain items at various levels of cognitive ability. Consequently, it is important to be able to understand, apply, and analyze the material as you would on the job. Although all questions will be in a multiple choice format, the items will be presented in a number of forms. For example, a written scenario may be followed by a series of three or four questions.

Some test takers are anxious about taking tests and need to simulate the test taking situation. If this is true for you, you may want to give yourself actual practice in a quiet, distraction-free environment.

General Strategies for Taking Written Tests

The basic format for this test is the multiple-choice format with four distinct choices. Here are some general hints for taking this type of test.

- ❏ Most importantly, the test is designed to have only one answer that is best from among the four choices.
- ❏ Your attitude about the test process can make a difference. Approach the test confidently. Arrive in plenty of time for the test so you do not feel rushed.
- ❏ Be certain that you understand how to correctly use the computer scanable answer sheet. Take care in making clean erasures on your answer sheet and to only mark one correct answer per test item.
- ❏ Proctor instructions read to you are very important, so be sure to listen carefully. There may be helpful clues given during the proctor instructions. Ask questions if there is something you do not understand about the procedure, but be aware that your proctor cannot answer questions about test content issues.
- ❏ Read all directions carefully, twice if necessary.
- ❏ Your score on this test will be based only on the number of correct choices you make (the number of times you select the best choice from the four given). All test items are equally weighted even though there are different weights for specific sections of the test. You may guess on questions you are not sure of as you go through the test. Mark them in your booklet for further consideration if you have time after you finish the entire test. Remember, this test does not penalize you for incorrect answers or guessing.
- ❏ Read each question carefully, making sure that you understand it before you answer. Re-read it if necessary, but do not waste time on questions that seem too unfamiliar or difficult. Interpret words according to their generally accepted meanings. Rephrase or underline key words in difficult questions. No question is intended to be a trick you.
- ❏ Answer the easy questions first; postpone more difficult questions until later, making an initial guess in case you do not have enough time to go back to it. Check your answers if you do have time, but remember that often your first response is correct.
- ❏ Watch your time carefully during the test.
- ❏ If you feel an item is a problem, you may call it to your proctor's attention after the test is over. Any items brought to the attention of the proctor after the test will be carefully reviewed by subject matter experts and occupational testing specialists. Together, they review this information and often find that the candidate has just missed the point of the item.
- ❏ Try to focus on doing well on many items on the test rather than getting bogged down on "making your case" on just one item that counts as one point. CPS uses extensive quality control measures to ensure a flawless test, including panel reviews by qualified subject matter experts in your field, in addition to state-of-the-art computerized scoring and item analysis techniques.

Examination Content Overview

The examination includes a wide range of lead poisoning prevention topics. The table below indicates the portion of the test devoted to each major topic. The interrelated nature of the Lead Project monitor knowledge, skills, and abilities means that many items will relate to more than one topic. The examination contains 109 questions. Nine of the items on the test are experimental and are not used for scoring. The experimental items appear in a random manner throughout the test.

Detailed Content Categories

The following are detailed descriptions of each content area and the percentage of items covering each area. The specific content areas should be interpreted broadly. For example, “explain places where lead can be found,” might have questions relating to process, regulations, guidelines, protocol, or generally accepted practices.

Abatement, Risk Assessment & Inspection:

Questions covering this area require the candidate to demonstrate his/her knowledge of, and skill to properly assess the adequacy of abatement, risk assessment, and inspection, plan a project, and determine the scope of work. Major knowledge, skill, and ability areas include:

- ❏ Knowledge of benefits and limitations of various containment and removal methods
- ❏ Knowledge of prohibited or not recommended removal methods
- ❏ Knowledge of different types of project clearance criteria
- ❏ Knowledge of clearance levels for window sills and window wells
- ❏ Knowledge of HUD clearance dust wipe sampling protocol
- ❏ Knowledge of different abatement methodologies (e.g., component, encapsulation, soil abatement, etc.)
- ❏ Knowledge of HUD prohibited abatement activities (e.g., open-flame burning, methylene chloride, etc.)
- ❏ Knowledge of appropriate methods of clearance cleaning (e.g., vacuuming, wet wash, etc.)
- ❏ Knowledge of methods of interim controls
- ❏ Knowledge of abatement terminology
- ❏ Knowledge of limitations of risk assessment methods
- ❏ Knowledge of different building components
- ❏ Knowledge of the order in which the construction process usually follows

Worker Protection & Safety Practices

Questions covering this area require the candidate to demonstrate his/her knowledge of and skill to ensure worker safety and provide a safe working environment by monitoring work practices. Major knowledge, skills, and abilities related to this section include:

- ❏ Knowledge of worker lead protection requirements
- ❏ Knowledge of Action Level (AL) requirements
- ❏ Knowledge of personal protection equipment
- ❏ Knowledge of different respirator types (e.g., negative pressure, positive pressure, and supplied-air, etc.)
- ❏ Knowledge of blood level that requires medical removal
- ❏ Knowledge of Cal/OSHA regulations pertaining to medical surveillance for lead work
- ❏ Knowledge of Cal/OSHA general worker protection standards
- ❏ Knowledge of the appropriate use of wash stations or ventilation enhancements
- ❏ Knowledge of emergency plan (e.g., route to and from hospital, emergency numbers, fire extinguishers, etc.)
- ❏ Knowledge of ladder, chemical, and confined space requirements (e.g., Cal/OSHA general construction safety orders)
- ❏ Knowledge of other Cal/OSHA and OSHA regulations (e.g., Injury Illness Prevention Plan, Respiratory Protection, and Hazard Communications, etc.)
- ❏ Knowledge of other hazardous materials at the work site (e.g., asbestos)
- ❏ Ability to calculate respirator protection factor
- ❏ Skill in monitoring work processes to detect inappropriate practices
- ❏ Skill in identifying and communicating worksite problems to the owner and contractor

Sampling Techniques & Interpretation

Questions covering this area require the candidate to demonstrate his/her knowledge of, and skill to properly conduct, interpret, and assess the adequacy of paint, dust, soil, and XRF sampling. Major knowledge, skill, and ability areas include:

- ❏ Knowledge of appropriate methods of soil sampling
- ❏ Knowledge of XRF testing
- ❏ Knowledge of air sampling equipment and media
- ❏ Knowledge of air sampling protocols
- ❏ Knowledge of air sampling units of measurement (e.g., volume in liters, duration in minutes, flow rate in liters per minute).
- ❏ Knowledge of appropriate laboratory analyses (e.g., NIOSH, EPA, etc.)
- ❏ Knowledge of the impact of various environmental conditions on air sampling results
- ❏ Knowledge of where, how many, and what kind of samples to collect
- ❏ Knowledge of dust wipe sampling protocol (i.e., procedures and techniques)
- ❏ Knowledge of the proper methods and types of soil sampling
- ❏ Skill in performing soil sampling
- ❏ Skill in identifying appropriate methods of testing
- ❏ Ability to relate findings of past clearance sampling with current project

Regulations, Standards & Guidance Documents

Questions covering this area require the candidate to demonstrate his/her knowledge of, and skill in applying regulations, standards, and guidance documents. A successful candidate should have the following knowledge, skills, and abilities:

- ❑ Knowledge of ambient air standards
- ❑ Knowledge of pre- and post standards for lead sampling
- ❑ Knowledge of Cal/OSHA Lead in Construction Standard
- ❑ Knowledge of total threshold limit concentration (TTLC)
- ❑ Knowledge of soluble threshold limit concentration (STLC)
- ❑ Knowledge of federal OSHA regulations
- ❑ Knowledge of Cal/OSHA regulations
- ❑ Knowledge of NESHAP regulations
- ❑ Knowledge of DHS regulations, policies, and procedures (including Title 17 and HUD Guidelines)
- ❑ Knowledge of Air Quality Management District (AQMD) regulations
- ❑ Knowledge of appropriate standards for record keeping
- ❑ Knowledge of Cal/OSHA housekeeping requirements
- ❑ Knowledge of Cal/OSHA signage for regulated work areas
- ❑ Ability to locate and apply applicable regulations (including hazardous material regulations)

Methods of Waste Storage, Removal, Transport and Segregation:

Questions covering this area require the candidate to demonstrate his/her knowledge of, and skill related to waste storage, disposal, transport, and segregation. A successful candidate should have the following knowledge, skills, and abilities:

- ❑ Knowledge of appropriate construction debris removal and safety
- ❑ Knowledge of Federal and State hazardous waste criteria
- ❑ Knowledge of California specific hazardous materials
- ❑ Knowledge of EPA identification numbers required on the manifest and how to obtain an identification number
- ❑ Knowledge of waste disposal methods for paint
- ❑ Knowledge of information required on the waste manifest
- ❑ Knowledge of waste segregation
- ❑ Knowledge of waste handling and storage
- ❑ Knowledge of the appropriate methods for transporting hazardous waste
- ❑ Knowledge of waste water management
- ❑ Knowledge of waste stabilization
- ❑ Knowledge of waste labeling
- ❑ Knowledge of Cal/EPA waste manifest requirements
- ❑ Knowledge of hazardous waste manifest requirements (i.e., hazardous waste generator responsibility)
- ❑ Knowledge of lead disposal restrictions
- ❑ Knowledge of the types of acceptable hazardous waste storage methods
- ❑ Knowledge of hazardous waste characteristics (e.g., flammability, toxicity, etc.)
- ❑ Knowledge of hazardous waste tests and associated regulatory levels (i.e., TTLC, STLC, TCLP)
- ❑ Skill in identifying California specific hazardous materials

Reference List

The following references, documents, and guidelines will help you prepare for the examination. These recommended references were established by the Childhood Lead Poisoning Prevention Branch in August 1998 and revised in January 1999. (Please note: You can get many of these items on-line by visiting **www.dhs.ca.gov/childlead/CRTexam.html**)

- ❑ California Code of Regulations, Title 22, Hazardous Waste Requirements, Sections 66260.1-66263.12, 66268.1-66268.124; Health and Safety Code, Section 25163
- ❑ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 4, Cal/OSHA Lead in Construction Standard, Section 1532.1
- ❑ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 4, Cal/OSHA Construction Safety Orders, Sections 1500-1938
- ❑ California Code of Regulations, Title Section 3203, Injury and Illness Prevention Program.
- ❑ California Code of Regulations, Title 17, Division 1, Chapter8, "Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards," January 8, 1999.
- ❑ DTSC Policy on Intact Paint Lead Painted Building Debris, Regulation Document #33; Revision #2; June 13, 1994 and Regulation Guidance of 22 CCR60201.24

- ❑ EPA National Primary and Secondary Ambient Air Quality Standard, 40 CFR 50.12 and 40 CFR 50.6
- ❑ Federal OSHA Hazard Communication Standard, 29 CFR 1926.59
- ❑ Federal OSHA Lead in Construction Standard, 29 CFR 1926.62
- ❑ HUD Guidelines, Chapters 4, 8-15, 18, June 1995 Chapter 7, 1997
- ❑ Safe Drinking Water and Toxic Enforcement Act of 1988 (Proposition 65)

* *Note: The exam reflects the final version of the DHS Title 17 Regulations released January 8, 1999.*

GOOD LUCK!